

REMARKS

Applicant respectfully requests the Examiner's reconsideration of the present application. Claim 29 has been cancelled. Claims 1, 25, 27, 28 and 33 have been amended. No new claims have been added. Therefore, claims 1-5, 7, 9-12, 25-28 and 30-33 are presented for examination.

Claim Amendments

Applicant has amended the claims to more particularly point out what Applicant regards as their invention. In particular, Applicant has amended to indicate that the second portion operates at a frequency greater than 950 MHz. No new matter has been added as a result of these amendments.

Rejections Under 35 U.S.C. §103(a)

McArthur

Claims 1-5, 7, 25-29, 32-33 stand rejected under 35 U.S.C. §103(a) as being anticipated by McArthur, U.S. Patent No. 5,805,806 ("McArthur"). Applicant respectfully submits, however, that the present claims are not anticipated by McArthur.

Independent claims 1, 25 and 28, as amended, include the limitation of a carrier modulated digital signal having a signal operating frequency greater than 950 MHz. McArthur fails to teach or suggest this limitation. The Examiner has equated the frequency band used by McArthur's local video channels with the claimed second portion of the operating frequency spectrum. However, McArthur discloses that "the frequency range from 750 to 800 MHz is used to implement eight local video channels." (McArthur, col. 4, lines 56-60). Thus, McArthur discloses that the local video channels operate within frequency ranges defined for conventional cable television services (i.e. 50-800MHz), and does not teach or suggest a carrier modulated digital signal operating at a frequency greater than 950 MHz, as claimed.

Furthermore, it would not be obvious to employ any digital signal having a frequency greater than 950 MHz in the system disclosed by McArthur, since McArthur teaches that "low-pass filter 122 allows only frequencies from 0 to 50 MHz to pass,

thereby isolating the LAN transceiver 128 from cable television and local video signals.” Such a combination would render McArthur unsatisfactory for its intended purpose, since it would result in signals greater than 950MHz being filtered out by the low-pass filter of McArthur, having been regarded as cable television and local video signals. (See MPEP 2143.01, discussed in greater detail below.)

Additionally, McArthur fails to teach or suggest a carrier modulated digital signal operating at a frequency greater than 950 MHz, as claimed. Instead, McArthur teaches away from the use of such a carrier modulated digital signal since the video signal is output from a PC in National Television System Committee (NTSC) format, which is a color analog TV standard. (McArthur, col. 4, lines 52-55). McArthur also discloses that “LAN/video interface 30 is designed to couple a PC having capability to generate composite video output to the network.” (McArthur, col. 8, ll. 6-10). Composite video is an analog format signal. McArthur overlays the local video channels in analog format onto the existing cable channels 118-125. (McArthur, Tables 1 and 2). Although McArthur discloses that “video information can be modulated onto any of the eight local video channels SN1 through SN8,” the modulated video information is not a “carrier modulated digital signal” as claimed, since McArthur’s local channels consist of modulated composite analog signals.

It is further noted that the FSK and QAM encoding schemes referred to by the Examiner (Office Action, p.2) are disclosed by McArthur as being used for the baseband digital signals operating at a frequency range of 0-50 MHz. (McArthur, col. 4, ll. 40-42, Table 1). The claimed carrier modulated digital signal operates at a frequency greater than 950 MHz, and thus is not equivalent to McArthur’s baseband signals.

Accordingly, it is respectfully submitted that independent claims 1, 25 and 28, and claims 2-5, 7, 26-27, 29 and 32-33 that depend from them, are patentable over McArthur for at least the reasons discussed above. Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

McArthur in view of Terry, et al.

Claims 9-12, 30-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McArthur in view of Terry, et al., U.S. Patent No. 5,499,047 ("Terry"). Applicant respectfully submits that the present claims are patentable over the combination of McArthur and Terry.

In the present Office Action, the Examiner has stated that:

Terry discloses the "signal operating frequency" range from 1150 to 1350 MHz...Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McArthur to utilize the "operating frequency" greater than approximately 950 MHz in order to increase the bandwidth thereby allowing more data transmitted in the cable. (Office Action, p. 12).

Applicant respectfully submits that there is no suggestion or motivation to combine McArthur with Terry as proposed by the Examiner. Applicant submits that the proposed combination of McArthur with Terry would render McArthur unsatisfactory for its intended purpose. MPEP 2143.01 states that "if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." (MPEP 2143.01, citing *In re Gordon*, 733 F.2d 900, 221 USPQ1125 (Fed. Cir. 1984)).

McArthur teaches that "cable television services generally occupy a range of frequencies from 50 to 800 MHz... In accordance with the present invention, the range of frequencies from 0 to 50 MHz is used for a local baseband (unmodulated) digital network." (McArthur, col. 4, ll. 16-23). McArthur also teaches that "low-pass filters... extract the baseband digital signals." (McArthur, col. 7, ll. 31-33). Additionally, McArthur teaches that "low-pass filter 122 allows only frequencies from 0 to 50 MHz to pass, thereby isolating the LAN transceiver 128 from cable television and local video signals." (McArthur, col. 8, ll. 38-41).

Terry teaches a "conventional cable television distribution network... which is supplemented with an additional bi-directional transmission capability." (Terry, col. 4, ll. 36-40). Terry also teaches that "each FTU 26 (fiber termination unit)...serves to supply to the coaxial cable...digital signals at frequencies above those of the analog television

signals already carried by the cable." (Terry, col. 4, ll. 47-54). Additionally, the Examiner has referenced col. 5, ll. 55-60 of Terry:

For the upstream direction of transmission, control signals can be carried in the relatively low frequency range from 5 to 30 MHz, but preferably control signals and possibly other data are carried in a QPSK (quadrature phase shift keyed) channel providing an upstream bit rate of 300 Mb/s in a frequency range from 1150 to 1350 MHz, as shown in FIG. 2. (Terry, col. 5, ll. 55-60).

The combination of McArthur's teaching that "low-pass filters extract the baseband digital signals", with Terry's teaching of "digital signals at frequencies above those of the analog television signals already carried by the cable," would render McArthur unsatisfactory for its intended purpose of using the "range of frequencies from 0 to 50 MHz...for a local baseband (unmodulated) digital network." Additionally, the low-pass filters taught by McArthur would filter out the high frequency digital signals (e.g. 1150 to 1350 MHz) taught by Terry. Therefore, Applicant submits that there is no suggestion or motivation to combine the teachings of McArthur with those of Terry.

Accordingly, claims 9-12 and 30-31 are patentable over the combination of McArthur and Terry for at least the reasons discussed above. Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

Williams, Jr. in view of McArthur

Claims 1-5, 7, 25, 27-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Williams, Jr. U.S. Patent No. 6,202,211 ("Williams, Jr.") in view of McArthur. Applicant respectfully submits that the present claims are patentable over the combination of Williams, Jr. and McArthur.

Independent claims 1, 25 and 28, as amended, include the limitation of a carrier modulated digital signal having a signal operating frequency greater than 950 MHz. In the present Office Action, the Examiner has admitted that "Williams does not specifically disclose the second portion operating at a frequency greater than a signal cut-off frequency defined for external television signal." (Office Action, p. 11). As discussed above, McArthur also does not teach or suggest the limitation of "the second portion

operating at a frequency greater than 950 MHz.” Therefore, the combination of Williams and McArthur does not teach or suggest every limitation of the claims. Accordingly, it is respectfully submitted that independent claims 1, 25 and 28, and claims 2-5, 7, 27 and 29 that depend from them, are patentable over the combination of Williams and McArthur for at least the reasons discussed above. Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

Conclusion

Applicant respectfully submits that in view of the amendments and discussion set forth herein, the applicable rejections have been overcome and the pending claims are in condition for allowance.

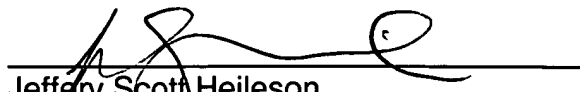
If the Examiner determines the prompt allowance of the claims could be facilitated by a telephone conference, the Examiner is invited to contact Scott Heilesen at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

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